

MCPB Item # 1-10-2008

# Memorandum

December 20, 2007

TO:

Montgomery County Planning Board

VIA:

John Carter, Community Based Planning Chief

Dan Hardy, Acting Transportation Planning Chief

Jorge Valladares, Environmental Planning Chief

FROM:

Shahriar Etemadi, Transportation Planning

Marion Clark, Planner, Environmental Planning

Judy Daniel, Bethesda Chevy Chase Team Leader

Charles Kines, Transportation Planning

Joshua Silver, Historic Preservation

SUBJECT:

BRAC Draft Environmental Impact Statement Evaluation

The Draft Environmental Impact Statement (DEIS) for the Base Realignment And Closure (BRAC) for the National Naval Medical Center (NNMC) in Bethesda, Maryland examines the potential environmental impacts of relocating major functions of the Walter Reed Army Medical Center from Washington, DC to the National Naval Medical Center in Bethesda, Maryland. In accordance with BRAC law, all realignments and closures must be complete by September 15, 2011.

#### **RECOMMENDATIONS:**

Planning Staff recommends the following comments to be transmitted to National Capital Planning Commission and the Montgomery County Council:

- 1. Submit future plans for campus development to M-NCPPC for mandatory referral reviews.
- 2. Support Alternative Two as the preferred alternative as it preserves historic Building 12, with the following comments:

- a. Minimize the addition of impervious surface and avoid or minimize impacts to the County's environmental buffers.
- b. Support additional on-campus housing for patients and visiting relatives to reduce the impact of the area's high cost of housing and lodging on visitors as well as the negative impact of visitor traffic on the area's transportation system.
- Construct the proposed pedestrian tunnel connecting Medical Center Metrorail
   Station on the west side of MD 355 at the National Institutes of Health (NIH) to the
   NNMC campus before September 15, 2011.
- 4. Support completion of all sidewalks and bicycle facilities in the identified study area.
- 5. Follow National Capital Planning Commission (NCPC) criteria for a parking space-to-employee ratio of 1:3 (one space for every three employees) for projects within 2,000 feet of a Metrorail station.
- 6. Complete the Transportation Management Plan to incorporate specific programs and performance objectives consistent with the County's Growth Policy.

Address comments 1-24 below in future submissions for Commission review, including the Final Environmental Impact Statement (FEIS) and mandatory referral documents.

#### Transportation Planning Recommendations:

- 1. Strengthen the Transportation Management Plan by requiring the implementation of the specific strategies identified on pages 71 through 74 of Appendix C, as opposed to making them selective or optional. Identify quantitative TDM program elements and performance objectives and how the achievement of performance objectives will be monitored. Changing words such as "may" or "could" to "will" or "must" converts irresolute ideas to firm commitments.
- 2. Provide exclusive turn lanes at all entrances to NNMC to limit the potential queuing at the access points along major arteries.

- 3. The traffic study contained in the DEIS recommends potential short term traffic mitigation measures that must be evaluated and considered in future studies that include the following:
  - a. An additional left turn lane along the eastbound and westbound approaches of Cedar Lane at MD 355.
  - b. An additional left turn lane along the southbound approach of Old Georgetown Road at Cedar Lane and elimination of on-street parking along eastbound Cedar Lane to provide for an additional receiving lane.
  - c. Conduct a full intersection study, including a traffic signal warrant analysis and new geometric design at the intersection of MD 355 and North Wood Road.
  - d. Change lane configuration to provide for an exclusive left turn lane and a shared through/right turn lane at the intersection of MD 355 and Jones Bridge Road.
  - e. An additional left turn lane along the eastbound approach of Jones Bridge Road and a separate right turn lane along the southbound approach of Connecticut Avenue (MD 185) at their intersection.
  - f. All gates for vehicular and pedestrian access must be evaluated for safety and security considering the provision of additional lanes and potential relocation of the security check points further inside the campus to ensure no vehicular queuing forms outside the gates and onto the adjacent streets. Specific improvements are stated in the DEIS but additional analysis are required to ensure improvements would satisfy the need for safety and security of the NNMC and elimination of potential queuing on adjacent streets.
- 4. The traffic evaluation contained in the DEIS recommends potential long term traffic mitigation measures that must be further evaluated and considered for future implementation.
  - a. Transit improvements that include a pedestrian connection in the form of a bridge or a tunnel between the Metrorail station on the west side of MD 355 and NNMC campus to eliminate the need for potentially difficult crossings of MD 355 for the Metro users. Building a tunnel is a priority for safety purposes, and provides the most desirable connectivity between the Metro station and NIH on the west side of MD 355 and the NNMC campus on the east side of MD 355. It must also be open to all pedestrians, not just NNMC visitors or Metrorail users. Staff recommends that a Metrorail access tunnel be implemented in the short term.
  - b. Pedestrian and bicycle improvements that include construction of 5-foot sidewalks and planned bicycle facilities on roadways identified in the DEIS. All missing segments of sidewalks and bicycle facilities in the study area should be built to provide continuity in the pedestrian and bicycle facilities network. Provide for ADA

compliant and curb access for disabled users. All intersections must provide for proper crossings that include appropriate markings and pedestrian signal phasing. Staff recommends that the completion of the sidewalks and bicycle facilities identified in the DEIS be included as a recommendation of the future study.

- c. Satellite Parking that provides for a park-and-ride lot with shuttles transporting employees and visitors to the NNMC campus. A location at the northeast quadrant of I-495 and Connecticut Avenue has been identified for approximately 250 parking spaces. This potential facility must be further evaluated as a park-and-ride lot primarily for NNMC employees and visitors but also for others who wish to use the Metro station at NIH site to reach other locations in the metropolitan area. Additional locations for satellite parking should be identified.
- d. Potential slip ramp access from I-495 into NNMC campus to reduce traffic on MD 355 should be studied for its feasibility.
- e. An additional lane in each direction on MD 355 should be studied for its feasibility.
- 5. The State of Maryland, in conjunction with County Department of Public Works and Transportation (DPWT) and M-NCPPC, must immediately start the feasibility study of the proposed short-term & long-term transportation improvements that includes corridor studies along MD 355, Old Georgetown Road and Cedar Lane with the \$2,010,000 fund being appropriated by the Congressional Omnibus Appropriations Bill for BRAC related transportation study in Montgomery County. The scope of this traffic study will be determined after the Final EIS is released. The grade separation of MD 355 and Cedar Lane that is recommended in the Bethesda Chevy Chase master plan should be included in the study scope.
- 6. Provide an updated traffic study at the time of submitting mandatory referral materials that incorporates findings and recommendations from the studies described above and incorporates travel demand management plan recommendations.

#### Community-Based Planning Recommendations:

- 7. Provide additional information on the potential impact of added out-patients and visitors on area lodging capacity.
- 8. Provide an update on the NNMC Campus Master Plan timing and issues under consideration.
- 9. Complete the Transportation Management Plan and provide mechanism for implementation of strategies contained in the TMP to reduce the need for expansion of roadways in the area
- 10. Coordinate with M-NCPPC staff to review and define the assessment of indirect land use impacts.

#### Historic Preservation recommendation:

- 11. The new buildings must be symmetrical around Building One.
- 12. The adjacent front planes of Building A (Outpatient Care Pavilion) and Building B (Inpatient Addition) cannot be forward (west) of the front of the wings of Building One.
- 13. The view shed west of Building One is to remain unobstructed. The west footprints of Buildings A and B, along Wood Drive, are to step away from the wings of Building One.
- 14. The front walls of Buildings A and B cannot be higher than the wings of Building One.
- 15. Building heights may be permitted to be higher than the wings of Building One provided their front walls are setback to minimize visibility from within the site.
- 16. The overall heights of Buildings A and B are to be the same.
- 17. New construction should respect, and enhance where possible, the historical importance of the other buildings and courtyards on the site.
- 18. The proposed additions should meet the appropriate design parameters for the site and building including:
  - Footprint
  - Building frontage/setbacks
  - Symmetry
  - Building heights
  - Preservation of view sheds and historic landscapes.

#### Environmental Planning Recommendations:

- 19. Show environmental buffer specified by Montgomery County Environmental Guidelines for the stream valley of the unnamed tributary of Stoney Creek.
- 20. Include impact on water resources and soil made by adding future athletic fields.
- 21. Include carbon emission analysis including impact of existing structures demolition.
- 22. Clarify the definition of forest.
- 23. Clarify the amount of forest on site.

24. Commit to providing the amount of forest required by Maryland Forest Conservation Act.

#### Background

The BRAC realignment impacting Montgomery County derives from the transfer of multiple medical functions from the Walter Reed Army Hospital Complex to the Bethesda Naval Medical Center, creating the Walter Reed National Military Medical Center (WRNMMC) at Bethesda. The BRAC law calls for completion of the merger, establishment of the WRNMMC, and closure of Walter Reed to be accomplished by September 15, 2011. This combined center is to serve as the premier Department of Defense medical center that includes specialized facilities for the most seriously injured service members, as well as ongoing services to veterans and military retirees. It will serve as the American military's "worldwide tertiary referral center for casualty and beneficiary care." That stated intent in this merger is to permit the joint military Services to "efficiently consolidate and utilize available health care resources and personnel."

The DEIS for the construction and operation of new facilities at NNMC included three alternatives.

- A No-Build alternative was included in this DEIS but is not a viable preferred alternative
  because according to BRAC Law, the realignment must be complete by the year 2011 and
  therefore, the No-Build alternative does not meet the requirements of the purpose and
  need for BRAC implementation. The No-Build alternative means that the existing
  facilities will remain as it is and therefore, no impact is expected.
- Alternative One would add approximately 1,144,000 square feet of new building construction, provide for approximately 508,000 square feet of renovation to existing buildings and provide for approximately 824,000 square feet of parking facilities.
- Alternative Two adds to NNMC an approximately 1,230,000 square feet of new building construction, approximately 423,000 square feet of building renovation and approximately 824,000 square feet of new parking facilities.

Exhibit 1 shows the NNMC site location. Exhibits 2 and 3 show the schematic layout for Alternatives One and Two, respectively.

The on-site functions for both build alternatives are identical. Both build alternatives are expected to increase staffing and visitors by an additional 2,500 employees and over 1,860 patients and visitors daily.

The primary difference between Alternative One and Alternative Two relates to site layout:

- Alternative Two would increase total impervious surface on site by 1.4 acres more than would Alternative One, but
- Alternative Two would not demolish a historic building (Building #12) that would be demolished in Alternative One.

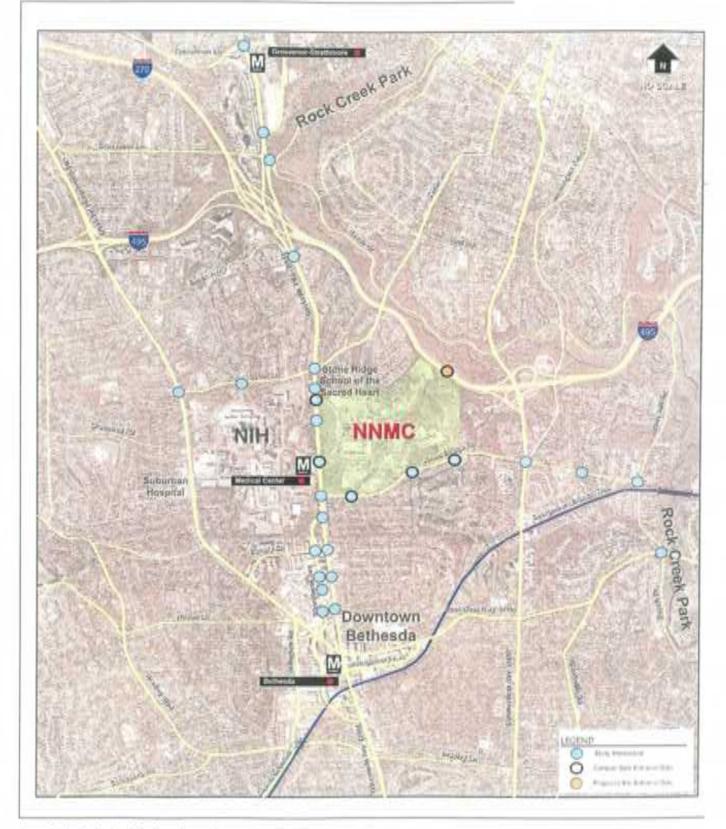
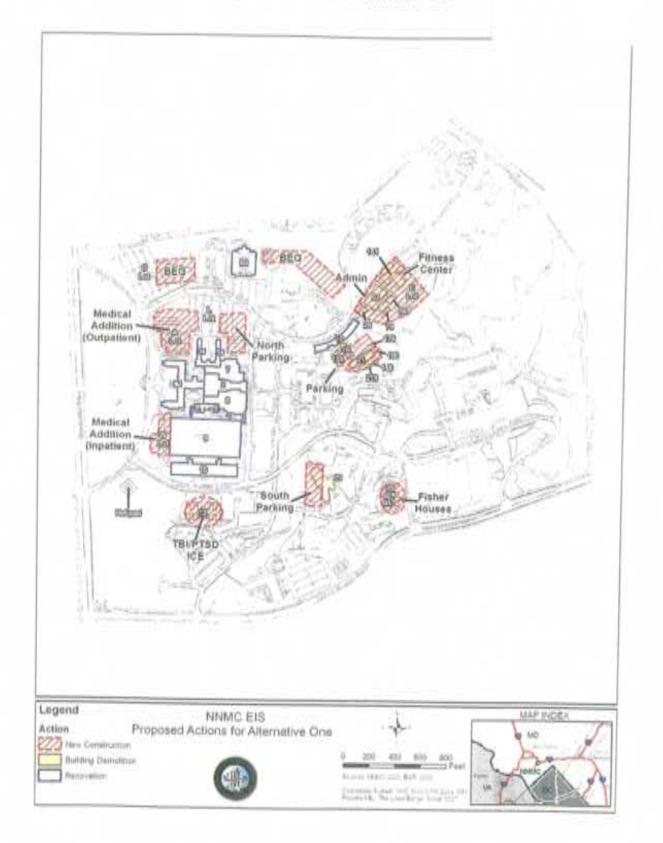


Figure ES-1 - Study Area Roadway Network

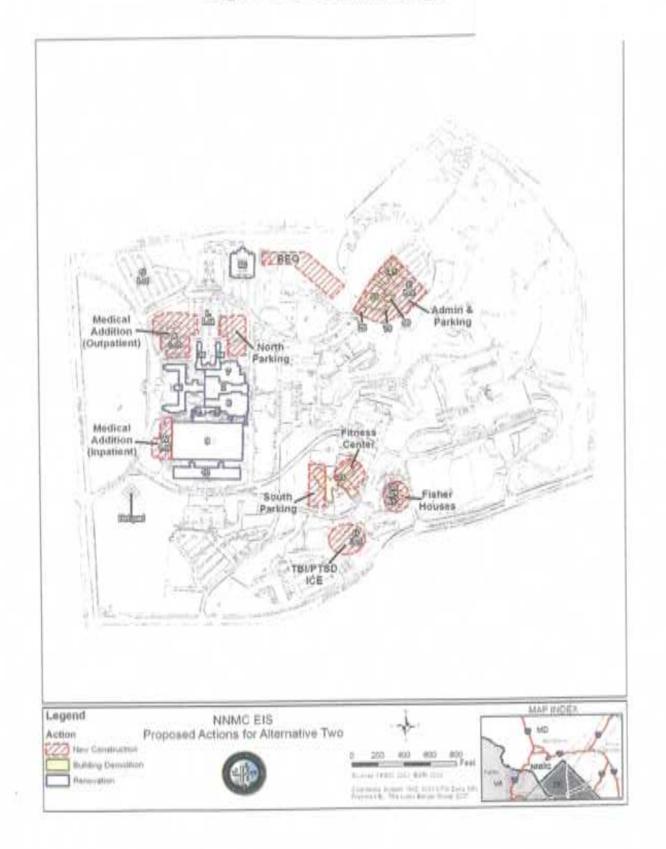
Figure 2-2: Alternative One

## **EXHIBIT 2**



### Figure 2-3: Alternative Two

## **EXHIBIT 3**



Alternative One appears more likely to encroach into stream valley buffers. Based on the available level of detail provided in the DEIS, staff supports Alternative Two as the preferred alternative, but additional avoidance and minimization of environmental resources should be pursued in the refinement of either alternative.

A summary of added facilities include the following:

- Added space for inpatient and outpatient medical care (including renovation of existing facilities)
- A center for the treatment of Traumatic Brain Injury and Post Traumatic Stress Disorder
- Added administrative space
- A new Warrior Transition Unit for aftercare and patient education programs
- Added Bachelor Enlisted Quarters
- A new fitness center for use of staff and rehabilitation of patients
- Added parking for staff, patients, and visitors adding 1,800 new spaces
- Two 21 unit each, "Fisher Houses", that serve as short-term lodging for patients and their families requiring extended aftercare treatment.

Beyond these elements, the following additional facilities are under consideration for the campus as well (page ES-6):

- Expansion to the Navy Lodge (a lodging facility for military personnel and military veterans) with no size estimate given
- Expansion to the Navy Exchange (a retail center accessible by current and former members of the military)
- Addition to the Senior Non-Commissioned Officers Quarters
- Two day care centers
- Improved athletic/recreation fields
- New truck inspection facility at Grier Road gate (at Jones Bridge Road)
- Access gate improvements for all entrance gates (to include two on Wisconsin Avenue, three on Jones Bridge Road)
- A new Nursing School
- A direct Metro rail access entrance
- A direct pedestrian connection between WRNNMC and the NIH campus

The added staff will work in shifts, varying to provide 24 hour care. The Draft EIS estimates up to 484,000 added patients and visitors each year, and assumes that they will arrive predominantly off-peak on weekdays or on weekends, averaging 1,862 patients and visitors arriving/departing daily.

Technical Errors are included in Attachment B.

#### **Study Process:**

- Review process
  - o Public Meetings and comments held between December 14, 2007 and January 28, 2008
  - o NNMC Public Meeting will be held on January 9, 2008
  - o Planning Board public hearing will be held on January 10, 2008
  - o County Council will be briefed on January 15, 2008
  - o County Council and Executive comments coordination
  - o County comments consolidated and delivered to NCPC by January 28, 2008.
- Prior Planning Board and County Council actions or briefings included the following:
  - o The County Council was briefed on BRAC efforts on January 30, 2007
  - o The Planning Board was briefed in February 1, 2007 and September 27, 2007 on BRAC activities
- Staff has attended numerous meetings and scoping sessions with reviewing agencies and provided the scope of work for conducting the traffic study included in the DEIS
- Staff is reviewing DEIS and is part of the County's review team for the DEIS
- Next steps in implementation
  - o The Final EIS will be reviewed and prepared during the months of February and April.
  - o A Record of Decision (ROD) is expected to be signed on May 28, 2008.
  - o MDOT use of Congressional funds for the traffic study begins soon after ROD.
  - o Campus master plan is currently under development but the date of release is not known.
  - o Staff would expect Mandatory Referral submissions by the end of 2008.

#### Staff Analysis

#### **Transportation**

The transportation study conducted in support of EIS has evaluated the existing condition as well as the impact of the built alternatives at the NNMC. The analysis was based on the 2,500 maximum number of additional employees expected on campus as the result of BRAC. The NNMC currently has about 8,000 employees and receives approximately 435,000 visitors a year. It is estimated that upon implementation of total built out of the campus, the number of visitors would increase by 484,000 additional visitors annually. These additional employees and visitors are estimated to generate approximately 866 morning and 921 evening peak hour trips on adjacent streets. Additional detail regarding the traffic study is included in Attachment A.

The study recommends mitigation measures to limit the impact of additional traffic generated to the site by employees and visitors. These mitigation measures are categorized in short and long term improvements. By law, the Defense Department is not authorized to spend any funding outside of the perimeter of military bases except in certain special circumstances. The Defense Access Road (DAR) Program is the vehicle by which the department could spend funds to mitigate their impact, but the NNMC site does not meet the criteria of the DAR Program, as discussed below. One type of road improvements possibly applicable for DAR funding at the NNMC could be mitigating the effect of queuing from the NNMC gates onto the adjacent streets, as such queuing could impact the public safety or security of the site. The transportation study also discusses implementation of a comprehensive Transportation Management Plan (TMP) with goals, objectives and strategies to reduce the need for single occupancy vehicles.

As this writing, the US Congress is expected to pass an Omnibus Appropriations bill that will include a \$2,010,000 earmark for a MD355 corridor study. The bill that is expected to pass is called: HR 2764, the "Department of State, Foreign Operations and Related Programs Appropriations Act of 2008." This funding will be available for studying the entire MD 355 transportation corridor and those connecting transportation facilities. This funding provides for feasibility studies of the recommended mitigation measures in the area adjacent to NNMC campus.

#### Existing Transportation Conditions

The NNMC site is served by a network of freeway, major highways and arterials. Rockville Pike (MD 355), a major highway, forms the western boundary of the site, The Capital Beltway (I-495) is to the north, and to the east is Connecticut Avenue (MD 185). The campus is bounded to the south by Jones Bridge Road. Other roads providing important transportation access to the site are Old Georgetown Road (a major highway) and Cedar Lane (an arterial). The Medical Center Metrorail station is located across Rockville Pike from NNMC with three to six minute train headways during the weekday morning and evening peak hours. There is an average of 5,100 weekday passengers boarding at this station. There are numerous bus lines on adjacent streets stopping at the site. NNMC operates two shuttle bus lines within the NNMC campus providing access to the Metrorail station and between the buildings. Other shuttle bus services access the site from other defense agencies in the region. There are a total of 6,123 parking spaces on campus. The proposed plans will demolish 700 existing parking spaces and add 2,500 new spaces for a net gain of 1,800 spaces.

Transportation Study in Support of EIS

#### Capacity Analysis

The traffic study in the DEIS provided the result of two methods of capacity analysis for all intersections. One is the Critical Lane Volume (CLV) that is used by MNCPPC for determining the level of congestion and the second method is the Highway Capacity Manual (HCM) technique that is required by other reviewing agencies. Attachment A provides more detailed information on transportation elements and the result of capacity analysis. As indicated in Table A-2, four of the intersections in the area will operate beyond an acceptable level of congestion after build out of the campus if no mitigating improvements were implemented.

The short term improvements recommended in the DEIS would satisfy the Local Area Transportation Review (LATR) requirements in effect prior to November 13<sup>th</sup> 2007 adoption of the growth policy.

Travel Time and Delay Survey

Travel time runs were conducted for major roadways and the Capital Beltway during the morning and evening peak periods. The result shows that average peak period speed on major roads in the peak direction is 50% of the design speed at best. Along sections of MD 355 and Jones Bridge Road, the average peak period speed is only 20% of the design speed, indicating substantial delay. The Capital Beltway average speed to design speed is about 20% in the peak direction in the afternoon peak period. It is noteworthy that along Rockville Pike in front of the NNMC, up to 50% of the traffic during the peak period consists of traffic from NNMC and NIH.

#### **Parking**

The proposed development on NNMC campus projects a net increase of 1,800 parking spaces. This combined with existing parking on site provides approximately 7,923 parking spaces on site. NNMC total future employees on site are estimated at 10,500. This results in a parking space/employee ratio of 1:1.3. This is a high parking space/employee ratio that will be counterproductive to achieving the goals of transportation demand management outlined in the Transportation Management Plan (TMP).

The EIS and TMP must reduce parking supply. The Transportation Element of NCPC's Comprehensive Plan for the National Capital Region stipulates that a parking ratio of 1:3 (1 space for every 3 employees) is appropriate for projects within 2,000 feet of a Metrorail station. As currently proposed, the EIS will add 1,800 net additional new parking spaces for 2,500 new employees. That translates to one space for every 1.4 new employees, well in excess of the NCPC guidelines. To be in compliance with NCPC guidelines, the number of new net spaces would be reduced to 833 just for the new employees. This calculation does not account for parking space needs for visitors; therefore we strongly suggest that subsequent planning documents, including the Final EIS and campus master plan more comprehensively address the issue of parking supply and management. The overall calculation (to be discussed in the master plan) should include:

- Existing parking supply for employees and visitors/contractors, etc.
- Current parking demand for those spaces
- Future parking demand for employees
- Future parking demand for visitors/contractors, etc.
- Strategies to reduce parking demand by employees
- Strategies to reduce parking demand by visitors/contractors

#### Transportation Management Plan

The proposed strategies identified in Appendix C of the Draft EIS to reduce single occupant vehicle travel to and from the NNMC are bold and innovative and have a high likelihood of success, if implemented as a total package. However, the language must be strengthened to require the implementation of the proposed strategies as opposed to making them a laundry list from which some strategies may be chosen for implementation and some not. For example, changing words such as "may" or "could" to "will" or "must" will convert creative, but irresolute ideas to strong, firm commitments. The strategies, as a complete package, can then succeed—with one caveat. The TMP must commit to stronger parking reduction measures consistent with NCPC guidance (see below).

We also would like to see the TMP more strongly tied to traffic impacts. The TMP essentially serves as the means by which the applicant will reduce travel demand, particularly Single Occupancy Vehicle (SOV) travel during peak periods. However, the TMP does not reference how it is helping to offset the traffic impacts and perhaps even reduce the need for capacity improvements such as adding turn lanes or reconstructing intersections. Further analysis should be guided by County's 2007-2009 Growth Policy.

#### Community Based Planning

### Land Use Impacts

The Community-Based Planning staff has three primary areas of concern regarding the land use conclusions within the Draft EIS. All relate to insufficient information being provided on critical elements of the expansion. Without this information the staff cannot fully assess the land use impacts of this expansion.

NNMC Campus Plan - The Draft EIS (page 3-55) reviews the NIH Master Plan Update (2003) but makes only a brief mention of the NNMC Campus Master Plan process currently underway. This limited discussion of its parameters and status is provided mostly as a part of other discussions, not as a separate section. This is important information that should be provided to the community.

#### Bethesda Chevy Chase Master Plan

The Draft EIS (page 4-62) states that the proposed land uses, because they are all on the existing NNMC property, are "consistent with existing plans and precedence and are compatible with adjacent facilities." It then concludes that there will be no direct effects or significant indirect effects outside the NNMC boundaries. The staff does not agree with this assessment, which is undermined by the acknowledgement that the proposed expansion is substantially beyond the expectations of the Bethesda Chevy Chase Master Plan.

While the BCC Master Plan certainly anticipated continued and expanded medical (and other) facilities at NNMC, the proposed uses are not the significant issue. It is the magnitude of the expansion within such a compressed timeframe that was not anticipated in the Master Plan.

#### Out-Patient and Visitor Impacts

The Draft EIS states that substantial numbers of patients will be arriving at the base daily (with their families or friends), but it does not indicate where they will be arriving from. The language implies that many patients will be living in the area and coming in for extended periods for outpatient treatment or therapy. It is important to know where these people will be living while in the area, particularly whether they be on other military bases or in private housing or hotels. This is a crucial element with no information that is discernable in the report. Depending on where and how these populations are to be housed, there may be a need to consider incentives for certain types of lodging options.

The Draft EIS states that additional NNMC traffic under BRAC is not a large percent of local traffic therefore the traffic "would not be expected to be the cause of indirect adverse land use effects that are significant". The staff disagrees with this assessment. We have not been provided with sufficient information in the Draft EIS to determine if this is true, as increased traffic is not the only element with potential to impact area land use planning. As noted, a compelling missing element is the potential impact that the added patient/visitors may have on area lodging capacity. Knowing what type of lodging facilities these visitors may or may not need (traditional rooms, extended stay rooms, etc.) would be very helpful to the master plan effort underway in White Flint.

#### Socioeconomic Impacts

In regard to the socioeconomic impacts of the BRAC action (page 4-67), the Draft EIS states that the additions to NNMC would have "no significant effect" on housing off base because there is no anticipated relocation of off-base personnel associated with the action, and thus no change in the supply or demand for housing in the study area. But again, there is no mention in this evaluation of the need for temporary housing for patients and their families who are not living on the base.

#### Historic Preservation

Montgomery County has recognized the significance of this historic site through the designation of the entire parcel of the National Naval Medical Center to the *Montgomery County Master Plan for Historic Preservation* in 1979. While Montgomery County recognizes the national, state and local significance of this site, it acknowledges the need for the proposed new construction/renovation to the historic buildings and modifications to the environmental setting of the property.

Historic Preservation Section staff concurs with comments and recommendations of the Maryland Department of Planning, State Historic Preservation Office (SHPO) response to U.S. Department of the Navy dated January 4, 2007, which states "the proposed undertaking has a

potential to affect historic properties. The Trust's finding of consistency is contingent upon the requirement that further consultation between the Applicant and the Trust take place: pursuant to Section 106 of the National Historic Preservation Act."

Historic Preservation Section staff concurs with the design parameters recommendations listed in the DEIS Appendix A: Correspondence and Public Involvement, National Capital Planning Commission (NCPC) Staff Recommendation document Page 5, including:

- The buildings must be symmetrical around Building One.
- The adjacent front planes of Building A (Outpatient Care Pavilion) and Building B (Inpatient Addition) cannot be forward (west) of the front of the wings of Building One.
- The view shed west of Building One is to remain unobstructed. The west footprints of Buildings A and B, along Wood Drive, are to step away from the wings of Building One.
- The front walls of Buildings A and B cannot be higher than the wings of Building One.
- Building heights may be permitted to be higher than the wings of Building One provided their front walls are setback to minimize visibility from within the site.
- The overall heights of Buildings A and B are to be the same.
- New construction should respect, and enhance where possible, the historical importance of the other buildings and courtyards on the site.

Historic Preservation Section staff concurs with the NCPC and SHPO staff findings listed in DEIS Appendix A: Correspondence and Public Involvement, National Capital Planning Commission (NCPC) Staff Recommendation document Page 7, that the proposed additions meet the appropriate design parameters for the site and building including:

- Footprint
- Building frontage/setbacks
- Symmetry
- Building heights
- Preservation of view sheds and historic landscapes.

Furthermore, Historic Preservation staff concurs with the SHPO conceptual approval of the location, footprint, and massing of the building, and the Section 106 consultation should be initiated as soon as possible to move forward with the design and planning details of the project.

The Montgomery County Historic Preservation Section looks forward to continue participation in the review process for this project as it moves forward.

#### Environmental Planning

Environmental Planning staff offers the following comments on the DEIS for BRAC and NNMC:

1. Although the Draft EIS recognizes the tributary on site as a non-tidal wetland, the Environmental Guidelines, approved by the Montgomery County Planning Board, distinguish it as a stream with a minimum buffer width. This stream is given a buffer width based on its location in the Lower Rock Creek watershed, designated Use I by the Maryland Department of the Environment. Use I streams are required by the Environmental Guidelines to have buffer widths of between 100' minimum, if the stream banks have gentle slopes, up to 150', if the slopes are 25% and greater. The Brinklow-Blocktown soil identified in this area indicates slopes of 15% – 25%, which, if verified, means a buffer width of 125'.

Given recent concern about the failing health of the Chesapeake Bay, placing a wider stream valley buffer along the tributary is the best step to insure public health at one of the nation's premier health facilities. Montgomery County is also contributing to upgrading the health of the Bay in several important ways. The County is in the process of developing a Water Resource Plan, required by the State of Maryland to comply with the Clean Water Act and the Chesapeake Bay Agreement.

- 2. If built, future athletic fields may require removal of valuable forest resources. Construction of athletic fields requires the land to be cleared, graded, and the soil altered and compacted. This will have short and long term impacts on water quality, carbon storage and sequestration, and soil health. Location of these facilities should be planned well in advance to determine the environmental impact. Consider building these facilities on top of structures with artificial turf.
- 3. Although the EIS accounts for the demolition of existing structures, there is no mention of recycling demolished materials. Since there is significant embodied energy in the materials of the existing structures, it is worthwhile to consider deconstructing and recycling these materials, rather than demolishing the structures and sending the materials to the landfill. In the short term, the landfill volume will be enlarged by adding the demolished materials to the cumulative waste stream. Furthermore, carbon expense is duplicated by using new materials instead of existing materials. To reduce the carbon footprint of the development, the Final EIS should include an analysis of carbon expense.
- 4. This document is unclear about what defines a woodland or forest. It is unclear whether the use of woodland or forest refers to the definition in the Maryland Forest Conservation Act, which is:
  - "a biological community dominated by trees and other woody plants covering a land area of 10,000 square feet or greater." and includes:

"areas that have at least 100 trees per acre with at least 50% of those trees having a 2 inch or greater diameter at 4.5 feet above the ground and larger; and forest areas that have been cut but not cleared."

- 5. The text refers to 24 acres of woodland north and south of USUHS on page 3-12, but the location of USUHS is not identified on the Natural Resources maps on pages 3-17 and 18. The acreage of woodland noted on page 3-13 add up to 25.5 acres, but it is unclear in the narrative if this refers to the "other smaller natural areas" and if it is in addition to or separate from the 24 acres of woodland. The aerial photos show 25.5 acres of forest plus the forested corridors along the tributary and roads, which may be a total of 45 50 acres. M-NCPPC Geographic Information System (GIS) shows 30.5 acres of forest on a 241 acre site.
- 6. The Draft EIS notes a plan will be developed to comply with the intent of the Maryland Forest Conservation Act. If the acreage above is correct, (30.5 acres on 241 acres) this site contains about 12.7% forests and would be required to provide an additional 2.3% or 5.5 acres. Since forests are so valuable in combating global climate change by sequestering and storing carbon dioxide, this minimum forest planting should be made a committed goal of the plan.

#### Funding of Required Improvements

An estimated \$70 million is needed for the short term transportation improvements identified in the DEIS to mitigate the BRAC Impact. These improvements are expected to mitigate the impacts of BRAC actions on intersection congestion. The State of Maryland has pledged that a substantial portion of that funding will be paid by the state.

A US Congressional fund of \$2,010,000 is expected to be available early 2008 to provide for the Transportation Improvement Study in the MD 355 corridor.

The Draft EIS concludes (page ES-19) that under the BRAC law, the U.S. Navy cannot provide funding or management of road improvements outside its property, except under the Defense Access Roads (DAR) Program. This program provides a means for the military to pay for their fair share of the cost of public highway improvements necessary to mitigate an "unusual impact" of a defense activity.

The document defines "unusual impact" as impacts such as a significant increase in personnel at a military installation," and that a "significant increase" is defined as one that doubles existing traffic at the year of implementation, or one that requires relocation of an access gate, or other unrelated criteria. It states that none of the BRAC changes meet this criterion for inclusion in the DAR program. The staff considers this to be an unsatisfying conclusion for the following reasons:

• First, it is curious that the EIS does not consider this merger of primary elements of two major military medical facilities in a densely populated urban setting to be unusual.

- Second, while 2,200 new employees may not be considered a "significant increase" in personnel, the impact of over 1,860 visitors and patients per day (484,000 per year) in addition to the added staff, is very significant in terms of land use planning.
- Third, while traffic may not be doubled, is it difficult to understand why the criterion does not take into account the existing level of traffic congestion.

Doubling traffic may or may not have substantial impact on a military base in rural or suburban locations where traffic is often not that heavy to begin with. But in a very congested urban area any substantial changes can cause excessive impact, a strict interpretation of this clause is not helpful when it is apparent that the changes will require extensive and very expensive modifications to avoid congestion that will be harmful to area residents and – equally important – the military personnel being treated at the facility.

### **Attachment A, Transportation Study Elements**

The transportation study of the EIS assumed the maximum build out of the campus as envisioned in the master plan that is an additional 2,500 new employees and associated patients and visitors. The study area encompassing 27 intersections were evaluated for the impact of BRAC. The traffic study followed MNCPPC Local Area Transportation Review (LATR) Guidelines to prepare the study and included the following components:

#### Trip Generation:

Two sets of data were examined and the data with higher trip generation value was selected to conduct the capacity analysis of 27 intersections in the study area. The NNMC consultant conducted traffic counts during the three hours of peak periods in the morning and evening at all gates and based on that, they developed the trip rates for NNMC. This rate was compared to the rates contained in the Institute of Transportation Engineering (ITE) Trip Generation (7<sup>th</sup> edition) for hospitals, military bases and research and development centers. The ITE Trip Generation rates were significantly higher than the rates developed based on the actual counts taken at NNMC site. MNCPPC requested and the NNMC consultant agreed that ITE rates produce more conservative result to be used to analyze the traffic impact of additional developments on NNMC site. However, staff agreed to reduce the rates by 15% to reflect the site's proximity to the Metrorail station. With the 15% reduction in rates, the trips used to evaluate the intersection capacity at identified locations are still higher than the rates calculated using the counts taken at the site. These trip generation rates included all trips attributed to employees, patients and visitors. The trip rates in the ITE report are based on traffic counts taken at many sites similar to NNMC around the country and that includes traffic for all visitors and employees. So, the rates applied here included employees as well as visitors and patients and therefore reflects a realistic assessment of what the future traffic would look like. Table A-1 below depicts the comparison between rates developed based on counts at the NNMC gates and the Institute of Transportation Engineering (ITE) Trip Generation, 7<sup>th</sup> edition.

Table A-1, Site Trip Generation Calculation

Land Use	Size	1.0144	AM PEAK H	OUR	PM PEAK HOUR						
		In	Out	Total	In	Out	Total				
Locally Derived	2,500	558	42	600	81	394	475				
Rates	Employees										
ITE Derived Rates											
Hospital	1,000	250	100	350	110	250	360				
	Employees										
Military Base	600	150	150	300	177	177	354				
	Employees		H 10 \$ 1-46 [ 3 - 4								
Research and	900	315	54	369	36	333	369				
Development	Employees										
Alternative Mode	15%	(107)	(46)	(153)	(48)	(114)	(162)				
Reduction											
	Total	608	258	866	275	646	921				

#### Trip Distribution

LATR Guidelines was used to estimate the trip distribution for assignment of site generated traffic to the area roadways. The trip distribution is based on the regional transportation model that assigns percentage of traffic to different transportation zones in the Washington Metropolitan region. Exhibit A-1 shows the regional distribution of trips generated from NNMC.

#### Background Traffic

The estimated trips generated by background development (developments approved but not built) in the area was added to the existing traffic and NNMC estimated trips to assess the total future traffic impact for all intersections in the area.

#### Capacity Analysis

Table A-2 below depicts the result of CLV and HCM analysis for level of congestion at each of the intersections in the study area

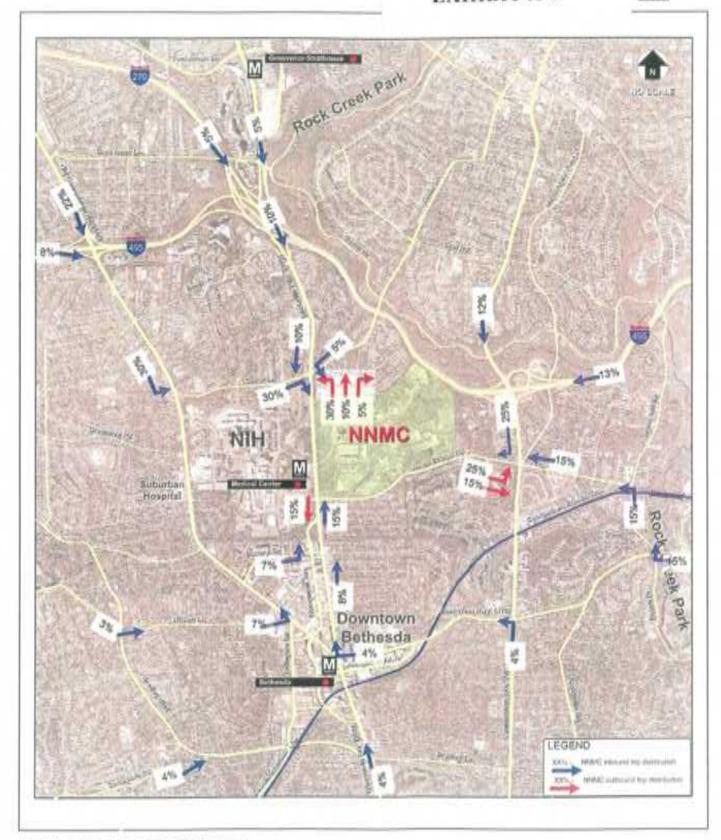


Figure 17 - Projected Site Trip Distribution Pattern

		ros			C/D	В		В	D/E	IT.		[I]		V	Ω	В	E/F	ပ	ш	B/C	C/D	B/C
		Total	Alternative I and II	(BRAC Action)	1307	1054		1097	1430	1822	-	1857		705	1375	1557	1593	1244	1722	1170	1319	1167
	KCL	SOT			C/D	В		В	Ω	Ĺ,		<u>г</u>		¥	၁	D	ы	B/C	H	4	В	В
	PM PEAK CLV	Background	CLV		1283	1030		1073	1407	1784		1660		513	1269	1366	1536	1146	1680	956	1101	1031
sis		TOS			C	A		A/B	D	Щ		ш		V	၁	D	Э	B/C	E/F	Α	В	A/B
y Analy		Existing	CL.		1255	596		1002	1348	1702		1496		438	1240	1337	1502	1135	1598	926	1071	1002
Table A-2- Result of Capacity Analysis	AM PEAK CLV	SOT			C	В		D	<u>ы</u>	ĹĽ		Ω		A	E/F	D	D/E	၁	D	В	4	Y
		Total	Alternative I and II	(BRAC Action)	1245	1099		1331	1562	2100		1324		626	1605	1401	1446	1187	1365	1093	844	859
2. Re		SOT			၁	В		C/D	田	ш		Ω		Ą	Э	B/C	D/E	B/C	D	A	A	A
Table A-		Background	CLV		1235	1076		1308	1539	2048		1324		549	1503	1154	1432	1167	1351	808	728	743
		SOT			၁	A/B		သ	田	Œ,		၁		A	E	B/C	D	B/C	D	A	A	A
		Existing	СГ.		1216	1017		1256	1489	2011		6811	:	448	1486	1137	1415	1150	1347	801	721	736
		Intersection			Rockville Pike &	Rockville Pike &	Tuckerman south	Rockville Pike & Grosvenor Lane	Rockville Pike & Pooks Hill Rd.	Rockville Pike &	West Cedar Lane	Old Georgetown Rd & West Cedar	Lane	West Cedar Lane & West Dr.	Rockville Pike & North Dr.	Rockville Pike & North Wood Rd,	Rockville Pike & Wilson Dr.	Rockville Pike & South Wood Rd.	Rockville Pike &	Jones Bridge Rd.	Jones Bridge Rd.	Jones Bridge Rd. & University Dr.
in the		Ref	#:		_	2		m m	4	S		9		7	∞	6	10	=	12	13	14	15

				1.											
		SOT		[I	<b>V</b>	A	3	В	Ą	<b>A</b>	⋖	⋖	٧	٧	∢
		Total	Alternative I and II (BRAC	2078	616	945	1535	1115	895	662	767	655	559	575	575
	KCL	SOT		Ľ	A	<	ш	æ	A	Α	A	A	A	A	∢
e A-2 Continued-Result of Capacity Analysis	PM PEAK CLV	Background	CLV	1994	823	878	1496	1097	888	655	760	623	531	548	555
naly		ros		ī.	A	A	D/E	В	A	٧	٧	٧	A	٧	A
pacity A		Existing	CLV	1927	795	854	1452	1067	846	621	725	592	528	544	552
of Ca		TOS		<u>н</u>	A	D	၁	B	A	⋖	A/B	A	۷	A	4
d-Result		Total	Alternative I and II (BRAC	1559	804	1335	1211	1104	921	759	979	814	594	580	589
atinu		SOT		田	A	၁	၁	В	<b>V</b>	⋖	⋖	A	4	٧	А
le A-2 Con	AM PEAK CLV	Background	CLV	1476	713	1268	1190	1071	915	752	972	776	583	569	577
Tak	PEA	TOS		D/E	A	၁	B/C	В	V	⋖	⋖	4	⋖	A	A
Tabl	AM	Existing	CLV	1437	694	1245	1163	1054	988	737	957	762	582	268	576
		Intersection		Connecticut Ave & Jones Bridge	Jones Bridge Rd. & Manor Rd.	Jones Bridge Rd. & Jones Mill Rd.	East-West Hwy & Jones Mills Rd.	Rockville Pike & Woodmont Ave.	Rockville Pike & Battery Lane	Rockville Pike & Cordell Ave.	Rockville Pike & Cheltenham Dr.	Woodmont Ave. & Battery Lane	Woodmont Ave. & Cordell Ave.	Woodmont Ave. & St. Elmo Dr.	Woodmont Ave & Cheltenham Dr.
1 A		Ref	#	16	17	18	19	20	21	22	23	24	25	26	27

### Attachment B, Technical Errors

- 1. The Draft EIS reference dating the M-NCPPC to 1972, should be corrected to read 1927 (page 3-56).
- 2. The Draft EIS incorrectly states that the 1990 Bethesda Chevy Chase Master Plan is currently being updated (page 3-56). The White Flint and Twinbrook Sectors of the North Bethesda/ Garrett Park Master Plan are being updated. And next year the Westbard Sector of the BCC Master Plan is to begin an update. But no update to the broader Bethesda Chevy Chase Master Plan is under consideration.
- 3. The Draft EIS uses a term (page 4.63) "flag housing" without identifying its definition.
- 4. There are several errors in depicting the lane configurations at studied intersections. These errors must be corrected and a new calculation of Critical Lane Volume and Level of Service calculated based on the correct lane configurations. Staff will provide these correction under separate cover.